

AMENDMENTS

In the Claims:

1. (Currently Amended) A method for cutting an associated ply stock (S) along a cut line using a cutting apparatus comprising a knife assembly, means for moving said knife assembly normally toward and away from said ply stock (S), and means for traversing said knife assembly between a first lateral edge and a second lateral edge of said ply stock, said knife assembly including a blade having a cutting portion including a leading point, a leading edge and a trailing edge, said trailing edge having an associated length (L), said ply stock (S) having spaced first and second lateral edges, the method comprising the steps of:

a. moving said knife assembly toward said ply stock (S) to insert the leading point of said knife blade into said ply stock (S) at an insertion point spaced a distance (D) from said first lateral edge wherein distance (D) is less than or equal to length (L) in order to back-cut said ply stock (S) from said insertion point to said first lateral edge with said trailing edge of said blade; and,

b. traversing said knife assembly across said ply stock (S) toward said second lateral edge in order to cut said ply stock (S) from said insertion point to said second lateral edge with said leading edge of said blade and provide severance of said ply stock (S) from said first lateral edge to said second lateral edge, wherein said leading point of said knife blade is inserted into said ply stock a single time to produce said transverse cut.

2. (Previously Presented) The method of claim 1 wherein the cutting apparatus further includes an anvil having a slot in a support surface, said slot being generally aligned with the cut line, the method further comprising the steps of:

a. inserting said leading point of said knife blade into said slot in said anvil after inserting said leading point into said ply stock (S); and,

b. maintaining said leading point within said slot while said knife assembly traverses said ply stock (S).

3. (Previously Presented) The method of claim 1 wherein said cutting apparatus further includes means for heating said knife blade, the method further comprising the step of:

heating said knife blade before inserting said leading edge into said ply stock (S).

4. (Previously Presented) The method of claim 3 further comprising by the step of:

maintaining said heating means near said first lateral edge of said ply stock (S) during the traversing of said knife assembly.

5. (Previously Presented) The method of claim 1 wherein said leading edge of said knife blade includes a concave cutting portion, the method further comprising:

engaging said concave cutting portion of said leading edge with said ply stock (S) after inserting said leading point into said ply stock (S).

Claims 6-8. (Cancelled)

9. (Currently Amended) A cutting apparatus for cutting an associated ply stock (S) having a width along a cut line between first and second lateral edges, said apparatus comprising a knife assembly, means for moving said knife assembly toward and away from said ply stock (S), and means for traversing said knife assembly between said first and second lateral edges of said ply stock (S), said knife assembly including a blade having a cutting portion including a leading point, a leading edge and a trailing edge, said trailing edge having an associated length (L), said cutting apparatus comprising:

said knife assembly having a home position wherein said leading point of said blade is directly above an insertion point of said associated ply stock (S) and wherein a distance (D) between said first lateral edge of said associated ply stock (S) and said insertion point is less than or equal to said associated length (L) of said trailing edge, wherein said leading point of said knife blade is inserted into said ply stock a single time to produce said transverse cut.

10. (Previously Presented) The cutting apparatus of claim 9 further comprising:
an anvil positioned below said knife assembly and having a slot in a support surface, said slot being generally aligned with said cut line.
11. (Previously Presented) The cutting apparatus of claim 9 further comprising:
means for heating said knife blade.
12. (Cancelled)

I. Rejections under 35 U.S.C. 103(a)

Claims 1 – 5, 9, and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Still, et al. in view of DE 1282914. Applicant respectfully traverses this rejection. Claim 1 has been amended to set forth the “leading point of said knife blade is inserted into said ply stock a single time to produce said transverse cut.”

This amendment is clearly distinguishable over the art cited. The benefit of the present invention two-fold: 1) it provides a transverse cut such that the ply stock edge is not torn, separated or crushed needlessly, and simultaneously 2) eliminating plunging which is undesirable as stated in the application on page 1, paragraphs 2-4. This inventive advantage is accomplished by inserting the leading point of the knife blade only one time into the ply stock in order to produce the transverse cut. Unlike Still, the leading point of the present invention is inserted into the ply stock once. Still requires that the knife blade be inserted into the ply stock twice. See column 7, lines 46 to column 8, line 6. The Examiner proffers that DE 1282914 renders the invention obvious. The configuration shown in the figures of the German patent are the exact problems that the present invention is trying to avoid, that is, avoiding a plunging motion to cut a ply stock. Because no single reference shows these two advantages simultaneously, i.e. producing a transverse cut with a single insertion of the knife blade, there is no motivation to combine the references to form an obviousness rejection. In DE 1282914 the blade must move vertically and it is submitted that it would not be obvious to combine the vertical moving blade of DE 1282914 with the traversed blade of Still. Further, since the German patent teaches the very problem identified in the instant patent application, it cannot be used to teach the solution of the present patent application. It is submitted that only through hindsight this is obvious and reconsideration and allowance of claim 1 is respectfully requested.

Claims 2, 3, 4, and 5, which are dependent on claim 1, are believed to be allowable for substantially the same reasons as claim 1 and such action is respectfully requested.

Claim 9, which is directed to the apparatus, has also been amended to set forth the knife assembly wherein the “leading point of said knife blade is inserted into said ply stock a single time to produce said transverse cut.” This claim clearly distinguishes over the prior art, especially the DE 1282914, which shows a plunging motion to sever the ply stock. Claim 9 is believed to be allowable for this reason and for substantially the same reasons set forth above for claims 1 – 5. Claim 10, which is dependent on claim 9, further defines the anvil as being positioned below the knife assembly and a slot “generally aligned with said cut line.” Here

again, the claim is directed to a cutting apparatus where the ply stock has a width and a cut line between first and second lateral edges, the knife assembly moving toward and away from the ply stock and means for traversing the knife assembly between the first and second lateral edges of the ply stock. Claim 10 is believed to be allowable for this reason and for substantially the same reasons set forth above for claim 9.

Claim 11, which is dependent on claim 9, is further directed to "means for heating said knife blade." Claim 11 is believed to be allowable for this reason and for substantially the same reasons set forth above for claim 9.

Claims 1 and 9 have been amended to set forth the invention where the cutting blade "is inserted into said ply stock a single time to produce said transverse cut." In DE 1282914 there is no suggestion of "traversing said knife assembly across said ply stock" since the blade is moved vertically and has a width greater than the width of the tape being cut. It is submitted that only through hindsight can the apparatus and method of these claims be combined. Even if combined they do not render obvious the invention set forth in the claims as amended.

Reconsideration and allowance is respectfully requested.

V. Conclusion

This case is now believed to be in allowance and such action is respectfully requested. The Commissioner is hereby authorized to charge any deficiency in the required fee or to credit any overpayment to deposit account 07-1725.

Respectfully submitted,

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